

WHAT IS CLAIMED IS:

1. A process cartridge which is constituted as one of at least two types of cartridges, a first cartridge and a second cartridge, and used selectively by being made detachably attachable to a main body of an identical image forming apparatus, wherein said first cartridge comprises:  
cleaning means which removes toner remaining on a surface of a medium;
- 10 a cleaning frame which receives toner recovered by said cleaning means and has an opening; and waste toner carrying means which is provided in the opening and carries the toner in said cleaning frame, and
- 15 wherein said second cartridge comprises:  
cleaning means which removes toner remaining on a surface of a medium;  
a cleaning frame which receives toner recovered by said cleaning means and has an opening; and
- 20 a sealing member which seals the opening without said waste toner carrying means being provided in the opening.

  

2. A process cartridge according to claim 1, wherein said cleaning frame used in said first cartridge and said cleaning frame used in said second cartridge are constituted by frames of a same shape.

3. A process cartridge according to claim 1,  
wherein said waste toner carrying means of said  
first cartridge comprises:

a waste toner carrying member which carries  
5 waste toner into said cleaning frame;  
a seal member which prevents toner leakage; and  
a receiving portion which receives a driving  
force transmitted from the outside of said cleaning  
frame to said waste toner carrying member.

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4. A process cartridge according to claim 3,  
wherein said first cartridge comprises:

a support member which holds said cleaning  
means; and  
15 a partition member which is supported by said  
support member and located above said waste toner  
carrying member, and partitions a part of said  
cleaning frame.

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5. A process cartridge according to claim 1,  
wherein said sealing member is made of resin  
and seals the opening.

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6. A process cartridge according to claim 5,  
wherein said sealing member is formed of an  
elastic member.

7. A process cartridge according to claim 1,  
wherein the opening and said cleaning frame are  
adhered through said sealing member by welding.

5 8. A process cartridge according to claim 1,  
wherein said sealing member is recessed in a  
central part thereof.

9. A process cartridge according to claim 1,  
10 wherein said medium, from which toner is  
removed by said cleaning means of said first  
cartridge, is an image bearing member and is provided  
in said first cartridge, and  
wherein said medium, from which toner is  
15 removed by said cleaning means of said second  
cartridge, is an image bearing member and is provided  
in said second cartridge.

10. A process cartridge which is constituted as  
20 one of at least two types of cartridges, a first  
cartridge and a second cartridge, and used  
selectively by being made detachably attachable to a  
main body of an identical image forming apparatus,  
wherein said first cartridge comprises:  
25 an image bearing member;  
a toner frame which contains toner to be  
supplied to said image bearing member;

cleaning means which removes toner remaining on a surface of said image bearing member;

a cleaning frame which receives toner recovered by said cleaning means and has an opening; and

5 waste toner carrying means which is provided in the opening and carries the toner in said cleaning frame,

wherein said second cartridge comprises:

an image bearing member;

10 a toner frame which contains toner to be supplied to said image bearing member;

cleaning means which removes toner remaining on a surface of said image bearing member;

a cleaning frame which receives toner recovered

15 by said cleaning means and has an opening; and

a sealing member which seals the opening without said waste toner carrying means being provided in the opening, and

wherein said toner frame in said first

20 cartridge contains larger amount of toner than said toner frame in said second cartridge.

11. A process cartridge according to claim 10, wherein said cleaning frame used in said first

25 process cartridge and said cleaning frame used in said second process cartridge are constituted by frames of a same shape.

12. A process cartridge according to claim 10,  
wherein said waste toner carrying means of said  
first cartridge comprises:

a waste toner carrying member which carries  
5 waste toner into said cleaning frame;  
a seal member which prevents toner leakage; and  
a receiving portion which receives a driving  
force transmitted from the outside of said cleaning  
frame to said waste toner carrying member.

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13. A process cartridge according to claim 12,  
wherein said first cartridge comprises:

a support member which holds said cleaning  
means; and

15 a partition member which is supported by said  
support member and located above said waste toner  
carrying member, and partitions a part of said  
cleaning frame.

20 14. A process cartridge according to claim 10,  
wherein said sealing member is made of resin  
and seals the opening.

15. A process cartridge according to claim 10,  
25 wherein said sealing member is formed of an  
elastic member.

16. A process cartridge according to claim 15,  
wherein the opening and said cleaning frame are  
adhered through said sealing member by welding.

5 17. An image forming apparatus according to  
claim 10,

wherein said sealing member is recessed in a  
central part thereof.

10 18. An image forming apparatus, comprising:  
a process cartridge which is constituted as one  
of at least two types of cartridges, a first  
cartridge and a second cartridge, and used  
selectively by being made detachably attachable to a  
15 main body of an identical image forming apparatus,  
wherein said first cartridge comprises:

cleaning means which removes toner remaining on  
a surface of a medium;

20 a cleaning frame which receives toner recovered  
by said cleaning means and has an opening; and  
waste toner carrying means which is provided in  
the opening and carries the toner in said cleaning  
frame, and

wherein said second cartridge comprises:

25 cleaning means which removes toner remaining on  
a surface of a medium;

a cleaning frame which receives toner recovered

by said cleaning means and has an opening; and  
a sealing member which seals the opening  
without said waste toner carrying means being  
provided in the opening.

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19. An image forming apparatus according to  
claim 18,

wherein said cleaning frame used in said first  
cartridge and said cleaning frame used in said second  
10 cartridge are constituted by frames of a same shape.

20. An image forming apparatus according to  
claim 18,

wherein said waste toner carrying means of said  
15 first cartridge comprises:

a waste toner carrying member which carries  
waste toner into said cleaning frame;  
a seal member which prevents toner leakage; and  
a receiving portion which receives a driving  
20 force transmitted from the outside of said cleaning  
frame to said waste toner carrying member.

21. An image forming apparatus according to  
claim 20,

25 wherein said first cartridge comprises:

a support member which holds said cleaning  
means; and

a partition member which is supported by said support member and located above said waste toner carrying member, and partitions a part of said cleaning frame.

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22. An image forming apparatus according to claim 18,

wherein said sealing member is made of resin and seals the opening.

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23. An image forming apparatus according to claim 18,

wherein said sealing member is formed of an elastic member.

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24. An image forming apparatus according to claim 18,

wherein the opening and said cleaning frame are adhered through said sealing member by welding.

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25. An image forming apparatus according to claim 20,

wherein said sealing member is recessed in a central part thereof and has a shape for receiving a driving force receiving member which receives a driving force transmitted from the image forming apparatus.

26. An image forming apparatus according to  
claim 18,

wherein said waste toner carrying member is  
given a drive force by a drive source which is the  
5 same drive source as that for driving said image  
bearing member, and

wherein the drive source performs switching  
between driving force transmission means, which  
drives said waste toner carrying member, and driving  
10 force transmission means, which drives said image  
bearing member.

27. An image forming apparatus according to  
claim 18,

15 wherein said waste toner carrying member is  
given a drive force by a drive source which is  
constituted separately from a drive source for  
driving said image bearing member.

20 28. An image forming apparatus according to  
claim 18,

wherein said medium, from which toner is  
removed by said cleaning means of said first  
cartridge, is an image bearing member and is provided  
25 in said first cartridge, and

said medium, from which toner is removed by  
said cleaning means of said second cartridge, is an

image bearing member and is provided in said second cartridge.

29. An image forming apparatus, comprising:

5        a process cartridge which is constituted as one of at least two types of cartridges, a first cartridge and a second cartridge, and used selectively by being made detachably attachable to a main body of an identical image forming apparatus,

10      wherein said first cartridge comprises:  
              an image bearing member;  
              a toner frame which contains toner to be supplied to said image bearing member;  
              cleaning means which removes toner remaining on  
15      a surface of said image bearing member;  
              a cleaning frame which receives toner recovered by said cleaning means and has an opening; and  
              waste toner carrying means which is provided in the opening and carries the toner in said cleaning  
20      frame,

              wherein said second cartridge comprises:  
              an image bearing member;  
              a toner frame which contains toner to be supplied to said image bearing member;

25      cleaning means which removes toner remaining on a surface of said image bearing member;  
              a cleaning frame which receives toner recovered

by said cleaning means and has an opening; and  
a sealing member which seals the opening  
without said waste toner carrying means being  
provided in the opening, and

5       wherein said toner frame in said first  
cartridge contains larger amount of toner than in  
said toner frame in said second cartridge.

30. An image forming apparatus according to  
10 claim 29,

      wherein said cleaning frame used in said first  
cartridge and said cleaning frame used in said second  
cartridge are constituted by frames of a same shape.

15       31. An image forming apparatus according to  
claim 29,

      wherein said waste toner carrying means of said  
first cartridge comprises:

      a waste toner carrying member which carries  
20 waste toner into said cleaning frame;  
      a seal member which prevents toner leakage; and  
      a receiving portion which receives a driving  
force from the outside of said cleaning frame to said  
waste toner carrying member.

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32. An image forming apparatus according to  
claim 31,

wherein said first cartridge comprises:

a support member which holds said cleaning

means; and

a partition member which is supported by said

5 support member and located above said waste toner  
carrying member, and partitions a part of said  
cleaning frame.

33. An image forming apparatus according to

10 claim 29,

wherein said sealing member is made of resin

and seals the opening.

34. An image forming apparatus according to

15 claim 29,

wherein said sealing member is formed of an

elastic member.

35. An image forming apparatus according to

20 claim 29,

wherein the opening and said cleaning frame are

adhered through said sealing member by welding.

36. An image forming apparatus according to

25 claim 29,

wherein said sealing member is recessed in a

central part thereof and has a shape for receiving a

driving force receiving member which receives a driving force transmitted from the image forming apparatus.

5        37. An image forming apparatus according to  
claim 29,

      wherein said waste toner carrying member is  
given a drive force by a drive source which is the  
same drive source as that for driving said image  
10 bearing member, and

      wherein the drive source performs switching  
between driving force transmission means, which  
drives said waste toner carrying member, and driving  
force transmission means, which drives said image  
15 bearing member.

38. An image forming apparatus according to  
claim 29,

      wherein said waste toner carrying member is  
20 given a drive force by a drive source which is  
constituted separately from a drive source for  
driving said image bearing member.